

# CONSUMERS' RESEARCH

## GENERAL BULLETIN

VOL. II

OCTOBER, 1932

No. 1

### NOT CONFIDENTIAL

#### CONSUMERS' RESEARCH, Inc.

24 West 25th Street New York City

Organized and incorporated under the laws of the State of New York as a membership corporation to provide unbiased technical information and counsel on goods bought by the ultimate consumer; not a business enterprise, not operated for profit.

Beginning with this issue, the General Bulletin is published as a separate quarterly. The subscription year runs from October, 1932-1933. The General Bulletins are not confidential and are available to anyone remitting \$1.00. (Canadian and Foreign, \$1.50.)

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## Correspondence Schools and Their Contribution to Quackery in Education

EDUCATION, in all its branches, as supplied by Correspondence Schools, may now be purchased on the mail-order market, in the same way as any more tangible merchandise, particularly medical panaceas, cancer cures, miraculous reducing creams, nerve foods, vitality restorers, and kidney pills. It is astonishing how much these two groups of commodities have in common. They both have for the most part little or no value, often do more harm than good, sell at exorbitant prices on the strength of extravagant claims, and their respective sponsors only too frequently employ the most brazen, misleading advertising and high-pressure sales methods, victimizing those who can least afford any non-productive expenditures.

Perhaps one of the reasons why mail order medicine and education vendors adopt similarly roughshod trade practices is that they are often in direct competition with each other. This may appear strange; nevertheless, it is true. For instance, should an ambitious young man make up his mind to win the fair lady of his choice, gain financial success, attain promotion, or fulfill any other secret desire of his heart, a careful survey of the advertisements will reveal to him two distinct roads; each is guaranteed to constitute the safest, surest, and quickest short cut to the certain achievement of his dreams.

The ambitious youth may treat the situation medically, which requires him to do any or all of the following: eat three cakes of Yeast daily, take a

Scientific Home Tobacco Treatment, invest a few dollars in Acid Destroying Kidney Pills, or swallow a sufficient quantity of Vegetable Compounds, Herb Products, rub himself with Tropic Lotions, or use other magic preparations as directed. Should he, on the other hand, elect to reach his goal via educational treatments, he can most assuredly do so by enrolling for any one or more of the following correspondence courses:—Singing, Mind Reading, Law (LL.B. Degree), Banjo Playing, Salesmanship, Foot Correction, Crime Detection, Industrial Management, Poultry Raising, Civil Service, Growing, Broadcasting.

While some correspondence courses have real merit, particularly the college courses, most of the others have little or no value and many of them are sold by impressive claims and at excessively high prices. The following are but a few examples to illustrate how unscrupulous some correspondence schools are in their insinuations and promises, how masterful they are in the fine art of twisting and distorting facts and attracting prospects via the misleading implication.

The highest honors for artful advertising go to the International Correspondence Schools of Scranton, Pa. Their secret is to tell the truth, but not necessarily all of it. There is no law—or if there is one it's not enforced—against *not* saying things, and incomplete stories, told in the I. C. S. way, make most excellent copy. Here is a sample of the amazing success-stories describing the achievements of ex-students: "If you're not thorough, you're through!" "The Business Leaders of Today are the I. C. S. students of yesterday," runs their advertisement in the September 10, 1932, issue of *Collier's*, which goes on to tell of the romantic rise of Mr. Michael H. Krieger, who today, so runs the ad, "is works manager of the Durant Motor Company at Lansing, Michigan." "'There were high spots in that I. C. S. Course,' he says, 'which I needed for my climb . . .'" Apparently the ad-writer was not in touch with the situation regarding the Durant Motor Company, for a notice appeared about that time to the effect that although the plant of the Durant Motors Company was offered for sale at auction on September 9, 1932, by the receivers, there were no bidders. Perhaps Mr. Krieger had already climbed on to higher things.

To take another favorite type of correspondence school advertising—suppose the school prints the smiling picture of a prosperous looking youth, with the following explanatory remarks:—"John Smith's salary was increased by 300% since he enrolled!" They may not be making a single false statement, even though the full story is somewhat less sensational. The facts may be that Johnny actually enrolled some twenty years ago, when he was employed in a drafting room as an apprentice with a salary of about \$10 a week. He attended evening classes in drafting and, in addition, took a correspondence course in Civil Engineering. Twenty years passed and Johnny, growing into a first class draftsman, received steady promotion. There is

nothing startling, nothing exceptional about his salary increase, considering his low initial pay and long service. How much, if any, help the correspondence course was to him is another question.

The unemployment situation apparently has not affected correspondence graduates in the least. Employers in every business profession and industry seem to be searching eagerly for holders of correspondence school degrees, of whom, it appears, there is a pathetic shortage, especially as a great many graduates equipped with magic diplomas prefer to start into business for themselves and clean up a fortune as their own bosses. No wonder tremendous salaries must be offered to tempt them to accept positions from one of the many captains of business or industry who are ever competing for their services. The whole situation becomes clear after careful scrutiny of the literature in which correspondence schools describe their different courses and the success in store for those who have the insight to take them.

The Floyd Gibbons School of Broadcasting, located in Washington, D. C., invites one and all to prepare for a good paying position in Broadcasting. They teach Announcing, Singing, Publicity, Directing, Writing, Advertising, Dramatics, Humor, Music, Production and Selling, as applied to this easily exploited industry and also help their students in the building of a "Radio Personality." Graduates with limited success will have to be contented, the school frankly admits, with \$3,000 to \$15,000 a year, but those who become "Stars" will earn from \$50,000 to \$100,000. Depression or no depression, "Big Pay jobs await talented men and women with Floyd Gibbons' training . . .," says Mr. Gibbons modestly, offering to train personally, via the mails, every one who is ready to part with \$55 (on easy instalments) and what is more, he will help them to look for a job. He does not, however, guarantee to find one.

Those who would rather raise poultry than their voices should communicate with the National Poultry Institute, also of Washington, D. C. In consideration of small monthly payments totalling \$72.50, the institute's president, Mr. H. M. Lamon, who, by the way, is described as "The Foremost Poultry Educator," personally undertakes to see his pupils through. He explains that there is a serious shortage in trained poultry men right now, and that " . . . large operators are willing, even glad to pay \$35 to \$100 a week—or more—to men who have the training." Mr. Lamon will post to his students within a few months' time the required amount of training and his "Free Employment Department" will do its best to find them a good paying job. And even if this particular Department should fail, the students will not have wasted their time and money, for in any case, they will be given a "handsome" Diploma, a lifetime Membership to the N. P. I., and a collection of other precious souvenirs.

Of course, real "he-men," who would rather lead a life of "Thrills, Romance and Rewards" than feed chickens, will find their chance to make "Big Money,

Big Success, . . . \$2,500 to \$10,000 a year," by becoming Finger Print Experts. The Institute of Applied Science of Chicago, Ill., will help them, even as it has helped one of their other students, Garfield Rose, who received a \$10,000 reward for solving the mystery of the Sands bank bandits, before he even finished his course in crime detection. The Institute declares in one of its advertising booklets, "If you can understand the scientific explanations in this book, you can become an identification expert and secret service operator of no mean ability." Only fourteen \$5 payments stand between you and the privilege of bringing swindlers, thieves, robbers and murderers to justice.

It is no doubt less exciting but perhaps much more comfortable to sing one's way to fame and fortune. Minor details like not having a suitable voice need no longer stand in anyone's way. The Perfect Voice Institute guarantees to improve any voice 100% for \$89.50. With extreme consideration for innocent bystanders they have created a silent method of voice culture. Noiseless exercises in front of a mirror and letter-writing now make the training of prospective opera singers less a trial to neighbors and friends. The Federal Trade Commission has recently stopped this school from advertising that they can improve anyone's voice by strengthening his "hyo-glossus" muscle, as it was found that this muscle had nothing whatsoever to do with voice and tune production and was simply one of the large group of swallowing muscles. Unable to alter human anatomy and make it conform with their story, the Perfect Voice Institute made a few changes in their advertising literature instead, and now they achieve the very same marvelous results by strengthening their students' "Vocal Organs."

Working for the government is not a bad idea either, in the opinion of correspondence school advertisers. Those who are interested will find plenty of encouragement in the literature of the Patterson School of Rochester, N. Y., the Franklin Institute, also of Rochester, and the Instruction Bureau of St. Louis, Mo., which also operates under a variety of other names. These schools claim to know of many good government jobs which may easily be secured with the benefit of their training and tips, which sell for prices ranging from \$9.75 up.

The value of correspondence school training for Civil Service Examinations is clearly illustrated by the results of a survey recently conducted by the U. S. Civil Service Commission. It was found that out of 1,081 competitors in a Forest Ranger Examination 675 did not have the benefit of correspondence school instruction and that 189 of their number passed the examination, while out of 337 who did take such a course only 18 passed. In another instance out of 80 correspondence-trained competitors, only four passed and the papers of these four showed that they all had some practical experience.

The distinction of being first to administer High School Education in painless 5c doses is the just due of the enterprising E. Haldeman-Julius of Girard, Kansas. The glad news was announced through full page newspaper advertisements appearing in all

parts of the country, offering "A Complete High School Education" for \$2.98. ". . . Save \$7 . . . A High School Education Course in 60 Handy Volumes . . . Authentic, Accurate, Up-to-Date for Home Study . . . Only 10,000 more sets left . . . These volumes are available in this series only for which they were especially prepared . . . This advertisement will not appear again . . . Rush your order . . . Act at once . . . You have no time to lose . . ." are a few of the claims made in an advertisement which appeared in the conservative *New York Times*. The facts relating to this, the greatest educational bargain opportunity of all times, are equally interesting. The books in question are the so-called "Little Blue Books." The assertions that they are available in this series only, and that they were especially prepared for this educational feat, are what British diplomats would define as terminological inexactitudes. In fact, these sixty containers of condensed knowledge are all listed in the "Little Blue Book Catalog" and may be purchased individually at 5c each, postpaid. Therefore the extra special bargain price of \$2.98 represents a saving of only 2c on the sixty booklets. Under the heading: "Some of the Writers who have helped to make this High School Educational Course possible" the publishers list a few well known names. Clarence Darrow is among them. Does this mean that Darrow wrote a text book for High School use? Far from it. The reference is made to "Debate on U. S. Dry Law" (Clarence Darrow vs. Senator W. B. Wheeler, Little Blue Book No. 1256)—an interesting advertising device, but not as informing as might be desirable.

Whether a person actually attended High School, or acquired this education for \$2.98, or not at all, he is eligible to enter the American College of Chicago, Ill., or the Stephenson Laboratory of Boston, Mass., which are but two of the many correspondence schools giving courses in "Pedopractic" or "Foot Correction." "Do you want a new business or profession of your own, with all the trade you can attend to?" asks the former. "Then become a foot correctionist and in a few weeks earn big income in service fees." "Earn While You Learn," exclaims the latter. "The demand for your services will be so great that you can start in your own home and earn the cost of your training while you are studying Pedopractic."

All this may sound very promising, but authorities consulted by the National Better Business Bureau have expressed doubt concerning the possibility of teaching this subject by mail, and they were unanimous in stating that in their opinion the practice of this profession comes within the purview of the Chiropractic Acts of 37 States and under the Medical Practice Acts of the other 11. The replies to inquiries sent to the proper officials of 12 States, picked at random, reveal that not one of them would allow correspondence school graduates to practice Pedopractic, unless they became licensed as chiropractors. State officials also would not even admit to the licensing examination for chiropractors, applicants whose only qualification was graduation from correspondence schools.

Correspondence students of law, who intend to



take bar examinations and become practicing attorneys, will meet with a surprise very much like that awaiting their Foot Correctionist brethren. Under the rules governing admission to the bar, time spent studying law by correspondence is not recognized by 45 States, nor by the District of Columbia. However, anyone may take a bar examination in Nevada, Alabama or Georgia and, if successful, practice law there (whether he has taken a correspondence course or not). Law courses and LL.B. degrees may be obtained from the following business establishments: American Correspondence School of Law, Chicago, Ill.; Blackstone Institute, Inc., Chicago, Ill.; LaSalle Extension University, Chicago, Ill.

The schools naturally have neglected to make the limitations on the value of the degrees quite clear to some of their students, who will have wasted their time and about \$200 if they hoped to practice law in any but three states.

These unfortunates would have been aided to a wiser choice perhaps, had they taken a mind-reading course before going in for law. Nothing can be kept from graduates of A. Honigan, whose short advertisement tells the whole story: "I challenge you that I will teach you, by mail, in one lesson, the simplest, shortest method of all for \$1. Not telepathy. You can read one's mind to a dot by only looking in the eyes of partner, chum, sweetheart, etc. Praised by New York, Boston, Montreal Police Chiefs; colleges; Thurston; Blackstone; etc. If fake, let them arrest me."

People wishing to extend their physical structure rather than their spiritual knowledge and second-sight, will find special schools catering to their wants. Seekers of vertical extension cannot purchase the necessary education on this continent. But three education distributors in England, the London Health Institute, the Stebbing System, both of London, and Malcolm Ross of Scarborough are ever ready to remedy the lack of supply in American education on this particular subject. Correspondence students of the British schools are guaranteed to grow from 1 to 6 inches within two weeks. The fees range between five shillings and two pounds. Now that England is off the gold standard, short Americans have even less than the normal excuse for not growing.

Many correspondence schools offer "Money Back Agreements" to prospective students, promising to return every cent paid to them, at times even with interest, should the students not find the course satisfactory. However, it is not easy to obtain a refund on these agreements, in view of the many strings usually attached to them. In fact, if a student finds that his course is worthless, and stops studying and paying his instalments, the schools usually do everything possible to force the payment of the balance.—Money Back Agreements notwithstanding. They promptly make it clear to their delinquent students that the course must be paid for in full in any case. If a stubborn student says "No" to the demands, the fun begins. Letters start to pour in from the Educational Directors, Cashier, Credit Dept., Legal Dept., and the President himself. Dunning

letters, notices, final notices, legal looking papers with big red seals follow. If they do not work, the postman is kept busy delivering letters from Collecting Agencies or Adjusting Associations; clever letters, full of threats and promises, of sneers and flattery. They are well worth reading, and are a credit to the Collection Industry.

PAUL TELCO.

[Additional comment by the editors—

The National Home Study Council of Washington, D. C., a trade association, having among its members some of the largest institutions in the field, many of whom are mentioned in this article, adopted in January, 1927, a "Code of Ethics, and Educational Standards." On this occasion, among a great many other things they resolved so to conduct their "field of service as to deserve and inspire public confidence and to render restrictive legislation unnecessary."

This resolution and code of ethics is in accord with the standard practice among trade associations, which customarily adopt high-sounding ethical codes, which, as it is well known among business interests, are more distinguished by being broken than enforced. Indeed, enforcement is impossible in most cases, since adherence is voluntary and could not be otherwise, except when the code is tied up to law enforcement, as is to a certain degree the code governing professional groups such as physicians and engineers (in some states). The public has little protection, of course, against misleading claims and promises made in advertisements of members of the National Home Study Council or of any other voluntary trade group, so far as action by the group is concerned. This we hold to be substantially true in spite of the fact that this particular group "co-operates" with the Federal Trade Commission.

Except when correspondence courses are part of the extension work of a reputable university—and even then competent and workmanlike training cannot be guaranteed in every case—a prospective student will do well to be as skeptical of the values of the training as he should be of the claims for "hair restorers," "cancer cures" and other quack nostrums.]

### Biting the Biters

**H**ARDER times sharpen the wits and hedge around the once wide-open pocketbook of the consumer with a thorny barrier of sales-resistance. A note in *Domestic Commerce*, an official publication of the U. S. Dept. of Commerce, issued for business men, says:

"One owner of a department store, for example, doing over \$10,000,000 annually, stated that buyers in most of his departments are proposing to discontinue the offering of exceptional bargains. They have found that out of a full page of advertising, Mrs. Consumer will unerringly pick the few small lines that offer the best value for the money. He states that in recent months the tendency has been for the consumer to come and buy the one article and serenely pass up all the other longer [larger] profit items which the merchandise manager had

arranged to put temptingly in her way. Loss leaders come to be merely that; they lead to losses, rather than to extra sales."

It is interesting to note that this department store, in its sales policy, accents vendibility rather than any intention to give uniformly high value to its customers. In this instance, at least, the little fish have feasted on the worms, spurned the hook, and gone calmly on their way.

But Uncle Sam in his new role of aid to the guller in trapping the gullible, offers a business-like suggestion in *Domestic Commerce*:

"Items that are customarily used with something else are chosen as specials [an idea] which has two practical advantages; (1) It helps to increase the size of the average sale; and (2) it increases the volume of sales of the items on which the dealer's margin [profit] has not been cut [for purposes of baiting the customer]. The plan is reported to result in more net profits—to the dealer; the consumer is not included in the thoughtful pronouncements of the Bureau of Foreign and Domestic Commerce, except as to means of taking him in.

### Gruen Watches

IN CR's 1930 Handbook of Buying, *Gruen* watches were listed as *Not Recommended*. The Gruen Watch Makers Guild protested the listing and an official of the Gruen company took it upon himself to reply to a confidential letter which CR in good faith had sent to a subscriber in answer to his request for our reasons for not recommending the *Gruen* watch. The letter from the company is quoted here in part as a typical example of the business man's handling of scientific evidence marshalled to prove the superiority of his product, and oftentimes proving something else, or nothing at all.

"Of course I am not familiar with the manner in which your research is made, but you are certainly making a grievous [sic] mistake in not recommending Gruen Watches for we never could have built our business to its present size without being backed by good merchandise . . . The Dietrich Gruen is the finest made in the watch industry, none finer . . . Gruen Precision is of a quality on the average a little better than the average American watch—and the Gruen is of a quality equal to the better grade American watch . . . Attached are pictures of the plant here in Cincinnati and one of our plants at Biel, Switzerland.\* I could send you a lot of literature to show what we manufacture . . . In a few words I can say, the Gruen Watch Company does the largest business in fine watches exclusively, today."

\* One manufacturer sent CR a booklet full of names and addresses of contented users, and pictures of his sales force assembled at banquets in various parts of the country, as evidence that CR should reverse the listing of his obsolete and ineffective fire-extinguisher, with the plea that this group of "high-type men could not be induced to put their lives into the sale and distribution of an article which you, in your advice to your clients, refuse to recommend." Business, it is seen, remains in a pre-scientific era, even in trades where the application of science is most obvious, and most obviously needed.

In other words we were expected to believe in the superiority of *Gruen* watches on the basis of (unsupported) statements about the wide acceptance of the product, "the largest business in fine watches," "finest made—none finer," and pictures of factories. After more correspondence in which we pointed out that our recommendations are not and cannot in the nature of scientific evidence, be based upon assertions from manufacturers, five photostat copies of Bureau of Standards reports on *Gruen* watches were submitted by the manufacturer, with the assertion that these reports were "typical of hundreds of others awarded to Gruen watches."

The Bureau of Standards makes tests on four classes of pocket watches, class A, class B, Railroad Precision, and Business Precision, in order of decreasing precision requirements. The last or lowest grade test was selected as a basis on which to judge the *Gruen* watch reports. The Bureau of Standards circular No. 392 states "This test [Business Precision] is designed for ordinary commercial pocket watches, designated as 3-position watches, and is less exacting than any of the tests previously described."

In the light of statements made in advertisements for these watches the reports submitted are very interesting. Advertising copy runs as follows: "Slip a Gruen Quadron on your wrist. Trust it as you would a *fine pocket* watch. For the rectangular movement of the Quadron has set a world's record for wrist accuracy!" (Italics ours) "Weigh these points of VALUE: . . . UNCANNY ACCURACY as proved by official observatory tests, and by actual timekeeping service among thousands of men and women . . ."

The data submitted were not in a form to be directly comparable with the tolerances allowed by the Business Precision test, but a little careful analysis and arithmetic resulted in an approximate practical basis for comparison. It was found that only one of the five *Gruen* watches fell within the allowable tolerances for this, the least exacting of all the government standard watch tests.

In addition to the reports from the Bureau of Standards, five reports from a laboratory in Switzerland were also sent as confirmatory evidence of the superiority of *Gruen* watches. The "official" documents carried the following heading:

Official Controlment Offices  
for the  
Rating of Watches  
Instituted in the Towns of  
Bienne, La Chaux-De-Fonds, Le Locle, St. Imier  
(Switzerland)

The accompanying correspondence made the statement: "The photostats of the official Swiss Government tests enclosed were selected at random from 150 or more certificates which we hold here, the majority of which carried the especially good time results' citation."

We became suspicious of these reports because of the rubber-stamped recommendation "Especially Good Time Results" placed at both top and bottom of the documents. Such phrases do not come so readily to the minds of careful workers in government owned laboratories, that they would be marked

twice on each certificate with an added stamped notation.

After some investigation, it appeared that the so-called official Swiss government reports were perhaps not official in a strict use of that word, but were either those of a trade group bureau, or a local or cantonal watch rating bureau.\* The data were used, however, and compared with the tolerances for the Business Precision test in a manner similar to that of the Bureau of Standards reports mentioned hitherto. Only one of these five watches met the requirements for this test.

One does not expect the ordinary small wrist watch to keep anything like as accurate time as a good pocket watch, but when, through its advertisements, a watch manufacturer invites such a comparison, the consumer is justified in making it. On the evidence supplied by the manufacturer alone, it is our view that the advertising statement should be read in reverse, and that you should not "trust a Gruen wrist watch as you would a fine pocket watch."

### Standardization—with Variety

*(The following practical criticism of American commercial products and methods from T. N. Whitehead, an English engineer, the son of a distinguished philosopher, is digested from the Harvard Business Review for April, 1932. Mr. Whitehead is now an assistant professor in the Harvard Business School.)*

**B**y comparison with European shops the variety of goods to be found in American shops seems rather meager, while the rate of change in design is higher. This favors progressive improvement (which however does not always follow) and affords a wide variety and rapid obsolescence of styles in the long run, but a narrow range at any given time. Consumers unfortunately cannot spend years comparing goods before they buy. In spite of the millions of motor cars produced, for instance, the number of models is probably smaller than the real differing requirements among car-owners. The author recently had to choose wall-paper in an American shop, and was depressed by the inadequate range of patterns he found. "The same applies to almost any styled commodity that can be mentioned."

This condition has bad effects for both consumer and manufacturer. The consumer's repeated disappointments have a significance reaching far into biological considerations; he is deprived of the active relation to his environment which has been progressively attenuated with the decline of the handicrafts and which now finds almost its only expression in the selection and arrangement of commodities made by mass production. Thwarted in even this lower-grade, or substitute satisfaction, he buys at random, and becomes an easy victim for the meaningless and cluttering novelties which advertisers force upon him. This novelty market is unsatisfactory even for the manufacturer, because it "encourages that

worst bugbear of all, capriciousness of consumer demand . . . What is evidently required is some manufacturing organization which will permit of the economical production of a greater variety of commodities, coupled with a sufficient flexibility to enable a reasonable degree of change following progress in design. This would steady demand by giving it a rational basis for choice and at the same time broaden the variety demanded, thus diminishing the 'hit or miss' character of future demand. . . .

"This can be at least partly achieved by the rational development of component design." When the unit parts of a mechanism or a product are standardized, it is possible to combine those standard units into a large variety of end products. Compare house radiators with automobile radiators. The latter are usually made in one piece, so that to enlarge or change them in any way it is necessary to cut the metal or make a new mold. House radiators, on the other hand, are assembled by bolting together a number of separate units, and can be easily varied in size.

Obviously more different products can be made from fewer units or components, if the units are interchangeable. This can be demonstrated mathematically; it follows the analogy of the hierarchy of physical elements. From two initial units, the proton and the electron, atoms are formed in a variety of about ninety elements, which in turn combine into more than a million kinds of molecular substances, and these into innumerable higher structures and varieties of formed matter. "Thus at every stage beyond the first, a component is formed as an orderly arrangement of simpler components; and the increase of variety is very rapid, starting with two at the first level, and reaching countless billions at the fourth."

Engineering elements can be similarly analyzed, as follows:

First level: Raw materials; e.g., stone, earth, wood.

Second Level: A—Simple first-order components made by man; characterized by their chemical composition, not by shape or size; e.g., liquid oxygen, pig iron.

B—Formed matter in intermediate stages of shape and size not completely adjusted to final order of arrangement; e.g., metal rods, sheets, tubes; wooden planks; wire, thread, etc.

C1—Formed matter in final stages of shape and size, with general applicability; e.g., nuts, bolts, washers, balls for bearings, screws, nails, bricks, buttons for clothes, etc.

C2—Formed matter in final stages but with limited applicability; e.g., most castings, such as cylinder blocks for automobiles; cloth as cut for making into clothes; simple unstandardized parts of all sorts.

Third level: assemblies of the previous group.

A1—Simple standardized articles; e.g., hinges for doors, ball bearings, electric switches.

A2—Simple unstandardized articles; e.g., the steering gear of any given model of automobile.

And so on with more complex parts, which lie "somewhere between two rather opposite types,

\*Available expert opinion consulted on this point differed somewhat, but not on the point that these cantonal laboratories are not the official Swiss government watch-testing laboratories, which are located at Geneva and Neuchatel.



sometimes approaching one extreme" of standardization, sometimes the other extreme of diversity, "in which no component at any level has a wider range of application than the particular model of end product for which it was specifically designed."

"The evolution of the progressive component design of standardized parts must usually start from the simplest units upwards; at the lowest level this is already largely accomplished, and on the whole represents the modern drift." In detail, however, "mass production has drifted rather blindly towards standardization of the consumer's commodity, coupled with a relatively great variety of components, rather than the reverse. Clearly, though we may desire a variety in bathroom faucets as regards their style and capacity, rigid standardization of the parts involved in their inner mechanism could be only a blessing."

"The whole range of automobiles could probably be easily met by a choice of two dozen carefully graded back-axle shafts." The method has limitations, chiefly in "those exterior parts of a commodity which affect the 'style,' but in practice these limitations are not nearly reached and have not been systematically explored."

SUMMARY BY MARIAN TYLER.

### **Especially Worth Reading**

**T**HE reviews in this bulletin will not be confined solely to the newest publications. From time to time we shall discuss books and articles which clearly mark out an epoch in thought or organization of knowledge, particularly from the point of view of the person interested in consumers' problems or in consumption economics. The following is such a book.

*The American Public Mind.* By Peter Odegard (Ohio State University). \$2.50. New York: Columbia University Press, 1930. This, in our opinion, is a highly significant and important treatment of the character of the ideas and economic activities of Americans. It bares the pre-cultural inconsistencies of types of mind which are immersed in platitudes and stereotypes of social and political thinking, without any corresponding concept of the group-and-self-interest drives which are involved in the practical behavior of political and economic groups. Cheerful prevarication is shown to be carried on by business groups, even in their propaganda among school children, who are almost completely defenseless against misleading information. For example, a text-book prepared by public utilities and used in the schools of Ohio makes the astounding declaration that "Under the prevailing system of regulation they [the public utility companies] can make no profits in the sense other businesses do." The literature "demonstrating," as the eminent George B. Cortelyou put it, "these basic truths" was distributed free to pupils because taxpayers, who in a loose sense control the schools, think that that which the children receive gratis, is *in fact* received without cost. Likewise, taxpayers assume that an association of commerce like that in Chicago may have three or four members continually on a school board of eleven,

without the schools' being turned from purposes which are of use to the whole population, to purposes serving the special advantage of business interests.

The average taxpayer is ignorant enough of the practical operation of pressures in a complex society to suppose that he may look disinterestedly upon a situation in which "Clean up—Paint up—Plant up" campaigns are introduced into the schools at the instance of the paint manufacturers and dealers anxious to promote by all legal and tolerated means, the sale of their products. Odegard commends Meiklejohn's view that "All that the teacher has to give is just his way of thinking about the world." Allowing the teacher's vision to be distorted and consciously or subconsciously deflected by economic and social connections and pressures is dangerous to the integrity of the educational system. Such pressures, at their worst—as, for example, the payment of fees by public utility interests to college professors—are set forth in Gruening's book, *The Public Pays*, reviewed in the last General Bulletin.

Especially pertinent is a comment cited by Odegard, from the report of the League of Iowa Municipalities: "It is unfortunate that the people of this state cannot go to their employees in the engineering departments of the State University of Iowa City and the Iowa State College at Ames and secure fair and impartial information. It is a lamentable condition when a public official cannot trust the professional advice of . . . our state colleges [because members of their staffs] receive large fees from corporations for mediocre services . . ."

Only in part is the public to blame for that ignorance which, according to Professor Odegard, leads it to lend rapt admiration to the highest and most patriotic fervors of Edgar Guest and Arthur Brisbane, and to the yellow journals and films and tabloids. A school system which does not dare even to supply its pupils with inoculations against misleading advertising and salesmanship, we may be sure will turn out consumers more distinguished for their gullibility and intellectual ricketiness than for discrimination and judicial temper. The low state of professional ethics which will tolerate the operations of one of our leading psychologists to applying the "principles of the conditioned response to *Quaker Oats* and *Cold Cream*," and the most advanced techniques of quantitative chemical analyses to ridiculous falsehoods, misleading and grossly unscientific claims for toilet paper, must bear its share of the blame for the kind of America which we now find ourselves in. A "free" press financed by the advertiser, and a radio operated by "free private initiative" involve concepts completely subversive at the source and opposed to intelligent thinking—the type of reasoning that might be done by a population which had been educated rather than merely sent to school for education by free textbooks generously donated, or doctored by utility barons or breakfast cereal manufacturers. How these crude, conflicting, often contradictory and formless, yet massive and influential biases have brought about the uncritical, foggy and impressionable American mass mind, is set down in Odegard's book better than in any other place we know.

## Ever-Present Dangers from Lead and Arsenic

**L**EAD is one of the major causes of accidental and occasional poisoning of the individual, who is often subjected to such poisoning quite without his knowledge.

Industrial workers are exposed to serious health hazards from lead in numerous industries, including paint manufacture, typesetting, dye-making and silk dyeing, electroplating, enameling, and the use and handling of tetraethyl lead gasoline. In a single mid-western state, seventy processes were found in which lead or its compounds were handled in manufacturing, which have caused known cases of lead poisoning in recent times. Aside from these occupational risks the major sources of lead and arsenic poisoning at the present time for the average consumer are, we judge, two: the first, from water supplies; the second, from the residue of lead-arsenic spray applied to fruits and vegetables during the growing period to prevent insect damage.

The monumental work on *Preventive Medicine and Hygiene*, by Milton J. Rosenau, professor of preventive medicine and hygiene at Harvard Medical School, and formerly director of the Hygienic Laboratory, U. S. Public Health Service, discusses the peculiar and insidious hazard of water poisoning by lead service pipes or other lead objects used in collecting, storing, and delivering household water supplies. Indeed, aside from bacterial infections, lead is by far the most dangerous substance by which our drinking water is commonly contaminated. In the residents of Lancashire and Yorkshire, England, in a celebrated case, water delivered through lead pipes produced a mysterious bodily derangement for years before the cause was localized. In Somerfeld, Germany, and Lowell, Massachusetts, numerous cases of lead poisoning have been reported in past years.

Not more than a generation ago, it was extremely common to use lead piping in houses, and a great deal is still in use, not only in old plumbing but in newer installations. Since lead is so pliable and so easily managed in making connections, there is a great temptation to use short lengths of it, at least in difficult places. Lead poisoning in certain circumstances may come from a very few feet of lead pipe. All natural waters have some solvent power for lead, and the cleaner the water supply, probably the greater is the danger on this head. Even when the water is such that it has no tendency to dissolve lead, certain circumstances may arise, such as electrolysis in the piping arrangements, or changes in the character of the water, that may lead to lead poisoning. Lead pipes have even been put in soda fountains (soda syphon bottles frequently have lead valves or tubes), although lead in contact with carbonated or gassy water is particularly hazardous.

The extremely small surface of metal which needs to be exposed to the solvent action of a large volume of water to cause lead poisoning is well illustrated in several cases of poisoning cited by Dr. Rosenau: one where only 12 feet of the service pipe in a cistern was of lead; and another of a woman of advanced years contracting lead poisoning from a well con-

taminated by an old lead clock-weight which had fallen in. In this case it was 14 months after the occurrence before symptoms appeared. Improvement was noted within two weeks after the weight was found and removed, and complete recovery took place in four months. In another case involving 10 feet of lead pipe in a cistern, the recovery was only partial after two years.

The amount of lead sufficient to constitute a definite danger to health is far too small, of course, to be detected by the senses or in any other way than by delicate tests which can be successfully applied only by skilled chemists. One part of lead in two million parts of water has done serious injury to health. The maximum allowable limit tolerated in any water supply should probably be not more than one part in ten million. No one should drink or cook with water from a system containing lead piping except after running off sufficient water to account for all that which has been standing in the pipes, especially after any considerable period during which water has not been used.

The common use of storage batteries with radio sets and in automobiles has introduced a new and extremely dangerous source of potential lead poisoning. Most of those who handle such batteries in cleaning the terminals or making connections with wiring, are unaware that they are dealing with one of the most deadly poisons with which they are ever likely to come into contact. The dangers are especially great where such batteries are used in the house, and the deadly lead salts from the outside and from the terminals of the battery may readily be transferred by some accident of cleaning, wiping, or handling, to an article or appliance used in connection with the food or drink consumed in the household.

Babies have been frequently killed by chewing at the lead paint on their cribs, on other furniture or on toys. Even bullets carried for a time in the pocket have deposited sufficient lead on the skin, later to be transferred to the mouth with food or drink, to cause lead poisoning.

The symptoms of serious lead poisoning will not be discussed here. Suffice it to say that in the earlier stages, the attack is very likely to be confused, even by competent medical practitioners, with other causes of ill health, weakness, incipient disease, or obscure chronic disease conditions. The storage of lead in the body may go for long periods without detection, and suddenly become a dangerous illness due to a partial unbalancing of the body processes brought on by exceptional indulgence in alcohol, by badly balanced or deficient diet, or by an acute infection of any kind.

The extent of the ignorance of manufacturers and others of this deadly hazard is shown by the fact that recent cases have been brought by the Food and Drug Administration against candy manufacturers who have placed lead soldiers and other figures in "surprise" packages of candy sold to children. There must still be an enormous amount of this type of danger imposed upon the consuming popula-



tion by manufacturers inserting whistles, figurines, and other "prizes" in boxes of candied popcorn and similar confections. Naturally, the lead whistle or toy is a hazard both in its contact with the candy and the other food materials and in its subsequent use by the child. Lead poisoning is a grave and usually quite unsuspected danger to children, who, in addition to dangers already mentioned, may now absorb lead from contact with lead weighting in the silk garments of their mothers.

The following illustration shows clearly how practically impossible it is to isolate or guard oneself against many poisoning hazards. According to an item in the September 9th issue of *Science*, shortly after a certain gasoline station was opened in Wooster, Ohio, gasoline was discovered floating on the surface of water in a well located 450 feet away. Later, on the same day, a five gallon can was filled with gasoline from the well. On another day, 65 gallons were drawn off. A flowing spring 600 feet from the gasoline station was polluted and a creek was rendered unfit for drinking by livestock. A trusting confidence in the purity of ground water is usually unjustified and contamination with either bacterial or inorganic substances from neighboring dwellings, factories or shops, may occur under some soil conditions, and at any period, without the users of this water supply being given the least reason for any suspicion.

Most people are probably unaware of the risks of arsenic and lead poisoning they incur in eating fresh fruit such as pears and apples without first peeling them. Two compounds of arsenic are in common use for poisoning of insects, and one of these—lead arsenate—has come into enormous consumption as an agricultural insecticide. For this purpose it is used mixed with water, as a spray; or as a dry powder blown or dusted upon the infested plants or trees. Enormous quantities of this substance are sold, estimated to be about  $\frac{1}{2}$  pound per capita per annum, of which certainly a sensible proportion comes back to nearly every consumer of fruit and vegetable products when he purchases his market supplies.

Dr. Rosenau, to whom reference has already been made, has also dealt with the dangers of the abundant and increasing use of the salts of lead, arsenic, and copper to spray fruits, berries, and vegetables of all sorts. In his opinion, an apple will ordinarily carry about  $\frac{1}{2}$  milligram of arsenate of lead, equal to a little less than 1/100 of a grain per pound, which is the international tolerance enforced on export shipments of apples going to a number of foreign countries, but not enforced with respect to the domestic supply in the United States. Rosenau states that as much as 5 milligrams or 7/100 of a grain of arsenic has been found on the surface of an apple directly after spraying. A quart of strawberries may carry as much as 32 milligrams (40/100 of a grain) of arsenic—oxid of arsenic equivalent—and a head of cabbage may likewise carry a relatively large amount, especially on the outer leaves. Although Dr. Rosenau emphasizes the importance of thorough washing of all fruits, vegetables, and berries, we now know that such washing is largely ineffective or but a slight mitigation of the risk; modern techniques in apple packing, for example, call for a fairly elaborate chemical wash, using dilute acid. This method is not yet satisfactorily developed to a reliable basis of effectiveness and uniformity. Arsenic

may also get into food through the manuring of fields with superphosphates, and there may be sufficient arsenic absorbed by food plants in this way to cause illness.

Arsenical contamination of food and drink is common and the resulting injury may be acute, mild or chronic. We have not space to deal with the symptoms which arsenic produces in the human organism, except to say that it produces general poisoning, often with degenerative changes of an exceedingly serious nature; sometimes the optic nerve is involved, causing blindness. In some industrial workers the effects are similar to those of lead poisoning. Arsenic is present in almost all of certain metallic ores and is therefore encountered in smelting processes, whence it appears in many metals and alloys in which its presence is entirely accidental and usually quite uncontrolled.

Some of the occupations in which workmen are exposed to health hazards with respect to arsenic absorption are the artificial leather trades, bookbinding, carpet manufacture, dye-making, enameling, feather work, felt hat making, fur handling and preparation, the making and use of insecticides, coloring of linoleum, lithography, rubber and tire manufacture, paperhanging, colored pencil manufacture, pottery work, metal refining, sealing-wax manufacture, tanning, taxidermy, toy manufacturing, many kinds of factory work involving use of sulphuric acid, and wallpaper printing. Dr. Rosenau reports that the Massachusetts law forbids more than 1 grain of arsenic per square yard as a preservative for hides and skins, and for the curing of furs; yet analyses reveal that it may actually reach 170 times that figure. Of 42 samples of fur examined, 11 were found heavily loaded with arsenic—a factor of serious danger with furs that are worn on the person, or in fur rugs for floors.

Arsenic has in the past been a classic cause of poisoning in its occurrence in wallpaper, in which, through the presence of a certain mold, a deadly gas—diethyl arsin—has been liberated. This hazard has been reduced, although to what extent we do not know, by a law passed in at least one state in 1900, limiting the use of arsenic in wallpaper. Tests of the U. S. Department of Agriculture in 1904 found that only 4 out of 537 samples of wallpaper had more than the legal limit of 1/10 grain per square yard. No tests are known to have been made in recent times on American wallpapers. Nevertheless, wallpapers examined in England were found to contain as high as 500 grains (over an ounce) per square yard.

Arsenical sprays have also been a common hazard in their use as a protection of clothing against moths. It is unlikely that in the absence of specific enactments, practically enforced under expert and aggressive inspection and control work in specific localities, any protection of the population against the hazards above indicated can be assured except in so far as slow education of manufacturers and others takes place as a result of specific consumer-poisoning experiences. Manufacturers unfortunately do not come to study or deal with such matters until after damage has been done—often damage of a

very dramatic sort. The poisoning of many workers with radium watch dial paint, and in the early manufacture of ethyl gasoline; and of consumers with gases used in mechanical refrigerators in Chicago and elsewhere are instances in recent times demonstrating this point, well known of course, to experts in industrial poisoning hazards.

Arsenic poisoning is regarded as favoring growths of a cancerous nature—an observation made as long ago as 1887, with respect to long-continued irritation of small quantities of arsenic, and according to Rosenau, many subsequent observations have confirmed this view. The remarkable and unexpected forms in which the metallic poisonings may jeopardize the safety of the unsuspecting individual are illustrated by the wallpaper example already given, and by an epidemic of arsenic poisoning affecting 6,000 persons in England who drank beer made with glucose (now called "corn sugar") which in turn had been made by use of sulphuric acid contaminated with arsenic. According to a later discovery, shellac, commonly used for putting a shiny coating or gloss on bakers' goods and candies, contains arsenic as a contaminating substance.

The failure of governmental authority to control these hazards is in part due to the indisposition of government officers to disturb themselves about a danger of which only a few hundred of the entire population are aware, and partly to the fact that any discussion of the question, necessary in connection with aggressive enforcement, would bring business losses to a great many trades whose products would, for a time at least, be under suspicion. More important still is the practical lack of laws and enforcement authorities in city and state government that would suffice to give the state effective control over these dangers even if recognized. The risks are great, but in the main unknown, and until some serious occurrence similar to the beer poisoning or the recent poisoning of 300 French sailors by wine contaminated with arsenic (through an insecticide used on the growing grapes, it is believed) there is not likely to be any extensive consideration of this question in America. Isolated deaths and injuries, such as one reported from Philadelphia in August of this year, in which a four-year-old girl died from eating fruit sprayed for protection against Japanese beetle, are not sufficiently alarming to the uninformed layman to arouse public opinion to the fact that for every sudden death there are hundreds of slow poisonings. Arsenic poisoning has recently been found to be a potent though long unsuspected cause of eczema and urticaria in children. Both arsenic and lead may get into the milk supply through fodder sprayed in its growing stage with arsenic and subsequently fed to the cows.

As a test for arsenic is extremely delicate and costly, it is hopeless for any consumer, unless he has had definite chemical training and experience, to make it successfully. Science teachers in high schools and colleges, however, can perform it without difficulty. CR has had examined a very few food substances of a kind in which arsenic contamination might, from the limited literature of the subject, have been suspected, and has found it present in many

cases; more will be covered gradually as funds and time permit, but progress in this study will necessarily be slow on account of the great cost of determinations. Samples of California apples and pears showed *both arsenic and lead* (lead is the more poisonous), and in *three cases out of four* the arsenic was higher than the so-called government tolerance (this as already noted is not practically enforced to a degree affording the individual consumer of fruit and vegetables anything like the sure safeguards against slow poisoning to which his tax outlays entitle him). A sample of stick candy was found to contain about the same proportion of arsenic as the apples and pears, and one make of cigarettes—two to three times as much (we are not in a position to offer any judgment as to the practical hazard when arsenic is inhaled in cigarette smoke, but will report on this later). A well known brand of breakfast cocoa also was found to have a considerable arsenic content. Cherries, plums, berries, celery, cabbage and string beans are some of the many fruits and vegetables which have been found to contain arsenic. Western apples as a rule tend to have a higher arsenic content, since the climate on the average is drier and there is less chance that a part of the spray residue will be washed away by rains before the harvest.

So far as concerns the presence of *lead* in the fruit, which may be poisoned inside as well as on the skin where the main deposit exists, it is noted that the Department of Agriculture professes in correspondence we have had with them to tolerate no lead whatsoever. While this would be a wise policy, it is unfortunately not enforced and cannot be under present governmental administrative practices and the growing and marketing conditions, since lead is usually found in fruits to the extent of several times the quantity of arsenic present.

On our limited funds it is impossible for CR to do more at the present time than to issue a warning of the possible dangers involved. It is a subject well worth the expenditure of considerable time and money of a specially skilled staff of chemists and toxicologists, by some one of the foundations endowed by philanthropic funds for independent research. The government is well equipped to perform the duty, having a section in the Bureau of Chemistry and Soils employing two technical graduates specializing in the study of metal contaminations in foods. It is, however, not the policy of bureaus of the Department of Agriculture to report what they find, when such findings may cause even a slight reaction of the public against products of agriculture or industry. The cost of an arsenic determination on a single food sample may run to about \$10, and since the number of places and kinds of products where the contamination may be looked for runs into hundreds of thousands, it is clear that even on a mass analysis basis, a large sum would need to be spent in order to provide anything like an adequate picture of the situation, suitable as a basis for state and city action, in circumstances where federal enforcement authorities have suffered a practically complete breakdown both of leadership and control.

The Department of Agriculture, having a dual relationship to the subject—first, that of control of the food supply and second, that of not antagonizing the fruit-growing industry, upon whom in part it depends for the continuance of the other 99 2/3 per cent of its annual appropriation of 300 million dollars beyond that devoted to food and drug control, is given either to suppressing discussion of the subject entirely, or to referring to it in such back-handed fashion as the following from the testimony of Mr. J. E. Graf, assistant chief of the Bureau of Entomology, before a senate appropriations committee in 1930: "... it is a subject which we would rather work out very carefully before general recommendations are made. Our recent experiences with arsenical residues on various products have shown us that the public prefers to avoid as far as possible contact with poisonous materials." [Italics ours] The department experts well know that the public is not at all aware of the hazards with which most of us come into unavoidable contact every day or several times a day. It cannot "prefer" a course of action about which it is denied information. The first intelligent step to take is to inform consumers of the existence of the dangers they are incurring and in what products and directions the major risks exist. Economical production of fruit and vegetables free of insect damage and infestation is important, but it is far more important to be sure that a half-pound of arsenic per person per annum either does not get into a dangerous relation to our food supply, or, if some must unavoidably do so, that it is assuredly removed down to the smallest amount that refined chemical methods can detect. If the farmer is unable for technical or economic reasons to effectuate such removal of the poison residues with certainty, the government must step in and do it for him, and for the consumers of his product.

Some of the sources for information in this article are: *Preventive Medicine and Hygiene*, Milton J. Rosenau. New York: D. Appleton and Co., 1927; *Food Poisoning and Food Borne Infection*, Edwin Oakes Jordan. Chicago: University of Chicago Press, 1931; *Food Poisoning and Food Infections*, William G. Savage. Cambridge, England: University Press, 1920; *Encyclopedia Britannica*, 11th edition, article on *Adulteration*, Otto Hehner; Various experiment station bulletins; *Poison for Profit*, Schlink and Kallett. New York: Vanguard Press, 1932 (in press).

### Outline of Course for Consumers Now Available

THERE has been considerable demand, particularly from high school and college teachers, for a bulletin or pamphlet dealing with the material assembled and organized for the consumer's course given in the University of Tennessee during the summer session of 1932 by a CR staff member. Such a pamphlet is in preparation for mimeographing and shortly will be available at a price of 10 cents.

This pamphlet will contain an outline of the work, revised as a result of teaching this subject for the first time, with a suggested list of market studies or projects designed to test and evaluate consumer's information and buying skill, which may be conducted by the students taking the course. A fairly comprehensive bibliography on consumption eco-

nomics is included. It is possible that this material will also be useful to those attempting to form programs for groups and clubs interested in studying definite data on the consumer's position in the market.

### Analyses of Astringent Lotions

ALTHOUGH Consumers' Research realizes that cosmetics are luxury goods, and has in the past declined to spend money for tests in this field, we have become increasingly aware of the fact that it is a subject of great interest to many consumers, and a field in which a large amount of money is spent annually. In view of this fact, we are planning to make analyses, from time to time, of outstanding products on the market. The following are the results of analyses of four astringent lotions or "skin tonics," no one of which is to be recommended.

- I *Ambrosia* (Hinze Ambrosia, Inc., New York) \$1 a bottle. Analysis shows the chief ingredients to be ethyl (grain) alcohol, glycerin, and carbolic acid, with some perfume. Carbolic acid should not be used in cosmetics. A report from the New Hampshire State Board of Health (January, 1931) quotes authorities on toxicology to the effect that carbolic acid even in weak dilutions may injure the skin. Severe eczema has resulted from the contact of the skin with substances containing carbolic acid, and it may, in addition, cause general poisoning effects to the whole system. cr 32 C3
- II *Ardena Skin Tonic* (Elizabeth Arden, New York) 85c a bottle. Essentially water, with small amounts of ethyl (grain) alcohol and boric acid, and some perfume. cr 32 C3
- III *Orange Flower Skin Lotion* (Dorothy Gray, New York) 85c a bottle. Essentially water with a little ethyl (grain) alcohol, borax and some perfume. cr 32 C3
- IV *Astringent Wash* (Helena Rubenstein, New York) \$1 a bottle. Essentially water, with small amounts of menthol, zinc sulphate, and some perfume. cr 32 C3

The following table shows a rough approximation of the cost of the major or significant ingredients (based on current wholesale prices) which go to make up these washes, exclusive of the perfume and the bottle.

Lotion	Volume of Bottle	Approx. cost of ingredients per bottle (excl'g. perfumes)	Price to consumer per bottle
I	175 cc	\$0.06	\$1.00
II	120	0.02	0.85
III	115	0.01	0.85
IV	115	0.005	1.00

To add to the further disillusioning of those who may believe, in spite of the above findings, that the lotions contain some magic properties, we set down a few well recognized principles regarding the care of the skin.

There is no needed, or desirable substitute for mild soap and water as a cleansing agent.

No astringent nor any other cosmetic can refine enlarged pores.

The tingling sensation experienced from mystic and overpriced lotions is due mainly to the familiar action of the alcohol contained, which is mildly irritant (except that with *Ambrosia*, the tingling may be due to both the carbolic acid and the alcohol), but which has no lasting and certainly no known beneficial effect on the skin.



## CANNED SARDINES

A comparative study of 15 brands of canned sardines carried out under the direction of a technical expert to determine the relative value, cost and quality of these brands; averages are determined by 2 samples of each brand.

Brand, and packer or jobber		Net weight oz.	Sardines in Can Number	Length (inches)	Price (cents)	Cost per oz. of solids. (cents)	Flavor	Comments and Ratings	
North Star Herring in olive oil	Stavanger Preserving Co., Stavanger, Norway.	3.9	20	2.75	11	2.8	Very good	Best buy.	AA1
Kings Cup Sardines in olive oil	Carl O. Olsen & Kleppe, Stavanger, Norway.	(Declared Net wt. 3.75) 4.21	39.5	2.5	12.5	3.17	Excellent	Uniform. Very good buy.	AA1
Gondolier Boneless sardines in olive oil	Packed in Portugal for Societe Lazeran of Paris.	3.94	5	3.35	17.5	4.9	Very good	Tins seem to break easily. Scales on fish.	AA2
Sardinettes Brisling in olive oil	Norbest Canning Co., Inc., Stavanger, Norway.	3.25	35	2.15	15	4.0	Excellent	Hard to open; very nice; tiny. Very good buy.	AA2
Portola Sardines in olive oil	K. Hovden Co., Monterey, Calif.	3.65	10	3.7	20	5.6	Good	French pack. Tails on.	A2
Rocky Coast Sardines in olive oil	Norwegian Brisling Packers, Ltd., Stavanger, Norway.	3.70	21	2.62	15	4.5	Excellent; mild	Hard to open.	A2
Tristan Sprats in olive oil	Tristan, Douarnenez, France.	2.44	7	3.0	11	4.8	Good	Uniform, large, sprats, mild.	A2
Les Aphrodites Sardines in olive oil	DandiColli & Gaudin	4.3	7	3.75	50	11.3	Very good, pleasing but strong flavor	Brown and white stripes; large; peeled and boned. Good but expensive.	A3
S. & W. Sardines in olive oil	Sussman & Wormser Co., San Francisco, Calif.	3.4	12.5	...	20	5.8	Very good	Hard to open; not much oil. Sardines dark and streaky.	A3
Angelo Parodi Sardines in olive oil	Jobbers: Angelo Parodi, Genoa, Italy. Packed in Spain.	5.21	5	...	25	5.7	Very good; strong	Scaly, large. Very dark oil. Entrail of another fish on one.	B3
Marie Elisabeth Sardines in olive oil	Portimao, Portugal. Distributed by United Pure Food Distributors of New York.	3.74	10	3.0	25	6.7	Very good; strong	Key broke. Oil dark.	B3
Underwood American sardines in cottonseed oil	William Underwood, Boston.	4.04	6	3.6	12.5	3.4	Poor	Not uniform. Sticks to top.	C1
Northern Queen Small sardines in bouillon	Cecil Canning Co., Stavanger, Norway.	1.77	9	3.0	5	3.3	Very poor	Small amount of juice; medium size; stained cans; bones crumble easily.	C1
Yacht Club* Pilchards in olive oil	Rene Beziers & Co., Douarnenez, France.	6.35	7	3.19	25	4.57	Very good; strong olive oil	Large; scaly. Irregular.	C2
Lemarchand* Sardines in olive oil	J. Le Marchand, Treboul, France.	4.34	4.5	3.5	40	10.20	Very good; strong	1 shrunk, not full; stained. Poor buy.	C3

\*One can out of the two purchased in each case was a flipper, i.e., a can which is slightly swollen—occasionally due to overfilling but in most cases to the action of the contents on the tin container, or the formation of gas from spoilage. The contents of swelled cans are not regarded as certainly safe as food.

The "official" definition of sardines by the U. S. Department of Agriculture was formulated with the interests of the packers carefully in mind to include any fish of the clupeoid family, such as herring, sprats, brislings, and pilchards. Cans of sardines are required to show on the label only the nature of the ingredients used in preserving or flavoring, and the place of origin and preparation of the fish. The variety of fish, whether or not the true sardine (*sardinella pilchardus*), is not required to be designated. With respect to the oil in which the fish are usually packed, it is advisable to remember that the Department of Agriculture has modified its earlier ruling and now permits cottonseed or other bland vegetable "salad" oils to be labeled merely as salad oil, instead of by a name that will identify them to the consumer.

## Improvement in Silk Weighting Situation Depends on Consumer

A RECENT ruling by the Federal Trade Commission on weighted silk is a direct challenge to every consumer of silk. This ruling sets forth a definition of "pure dye" and of "weighted" silks which is to serve as an interpretation of the existing law which created the Federal Trade Commission and gave it power to act in cases where unfair trade practices are involved. There are various points in the ruling with which consumer leaders and the better retailers are not satisfied, although it furnishes the only means of protection against this particularly serious fraud which has yet been afforded the private consumer.

### *What is Silk Weighting?*

The silk weighting process consists of immersing the woven, unfinished silk fabric in baths of mineral salts. The silk fibers combine with the mineral salts and are much increased in weight as a result of the treatment. One very common method of weighting is by the so-called tin-weighting process, which consists of immersing the silk alternately in solutions of tin chloride and di-sodium phosphate. Each time the fabric is passed back and forth between these two solutions, its weight increases. As many as six passes are frequently given, thus building up mineral materials in the fabric to the amount of about 50 per cent of the finished fabric.

A silk which is weighted to the extent of fifty per cent of its total weight with tin salts has been shown by numerous researches to have an excessively short wearing life. Add wear and perspiration to the treatment, and the time required to render such a fabric totally valueless is greatly lessened. If under certain standard test conditions such silks are merely hung in a room of a private dwelling house and left undisturbed, they have been known to disintegrate in four months' or even less time, and could be pulled apart with the hands.

It is not at all unusual to find a fifty per cent tin weighted silk. A research subsidized by two anonymous consumers and carried on by Pauline Beery Mack of the Pennsylvania State College, and Freda Gerwin Winning of New York University, showed that with a fair cross-section of dresses purchased in the New York retail market at prices ranging from \$2.98 to \$59.50 (most of them sold as unweighted or very low-weighted silks), more than 90 per cent were of the 50 per cent weighted class. Information gleaned from various trade sources shows that this finding is fairly representative of the market.

### *The Reason for Mineral Weighting*

The practice of mineral weighting in this country is at least fifty years old, according to the records of the Silk Association of America. The introduction of the practice is justified by some silk mill men on the following basis: The raw silk fiber as spun by the silkworm is coated over by a soluble substance

called sericin. During the process of finishing the silk, this soluble coating (which constitutes about 16-20 per cent of the total weight of the raw silk) is removed. In order to restore the silk to its original raw weight, many finishers acquired the practice of passing the degummed silk through mineral-salt baths until it took up mineral constituents about equal in weight to that of the soluble coating or gum originally on the raw fibers. The silk manufacturers and retailers for years sold silk as "unweighted" which contained weighting to the extent of approximately 16-20 per cent because it was needed to bring the silk up to its original raw weight. The fact that even this amount of weighting reduced the durability of the silk did not enter into their consideration of the matter.

The practice of "par" weighting silk, or bringing it up to its original raw weight by the addition of minerals was followed by weighting many silks even above this amount. "The customer wants heavy silks," said the trade, and, instead of giving her a well constructed piece of heavy silk, she was given a piece of silk with considerably fewer threads in the crosswise direction than would be necessary in an unweighted fabric, weighting having been added to make the piece appear to be quite firm and heavy. This procedure might have been justifiable had the consumer been told that she was receiving a weighted piece of silk at a lesser price than she would be obliged to pay for an unweighted fabric, and if she had further been warned of the decreased serviceability of weighted silk fabrics. This was not the case, however. Heavily weighted silks were sold as "silk," or "pure silk," or "pure dye silk" in the majority of stores, and frequently at pure silk prices.

The wild scramble for business on the part of silk manufacturers, particularly since the introduction of the synthetic textile fibers, caused the silk weighting situation to get out of hand even so far as the manufacturers themselves were concerned. In order to produce silks at a price which would make a popular appeal, manufacturers vied with each other in cheapening their products through the application of ever increasing amounts of weighting. This had the inevitable result of breaking down consumer confidence in silk, and of injuring the silk market. Retailers also are not blameless in this connection, since they failed to give consumers correct information about silk or to use their economic power to force manufacturers to do so through a system of honest and informing labels on piece goods and garments.

### *Manufacturers Fail to Regulate Themselves*

The mad orgy of competition among silk manufacturers to weight silk fabrics to the extreme limit which they could stand without causing them actually to disintegrate before they were hurried through the retailer's hands to the consumer led the manufacturers to attempt some method of curtailing the amount of weighting. Late in 1928 the Silk

Association of America adopted a schedule of maximum weighting for each of the major types of fabrics on the market, and asked manufacturers to sign an agreement not to weight beyond the amounts specified. The schedule agreed upon included weighting amounts which have since been shown by various researches to reduce the durability of silk seriously. Those who signed the agreement did so voluntarily, and no policing action was possible to enforce adherence to the schedule either among the signers or non-signers.

A few months after the agreement was signed it developed that even some of the signers were violating it. This led to additional conferences of manufacturers, called by the Silk Association of America, with the result that the schedule of maximum weighting percentages was revised upwards, i.e., to looser restriction than before. No one in the industry claims that the second schedule was kept any more rigidly than the first, and bootleg silk manufacturers abounded among both the signers and non-signers of the schedule. No one feels that even if the schedule had been kept the consumer would have profited materially, since, first, the amount of weighting permitted in both the old and the new schedule was such as to reduce the durability of the silk thus weighted to a marked extent; and, second, no provision was made for assuring the private consumer who wished to purchase unweighted silk that she was getting it.

#### *The Consumer Enters the Controversy*

In order to present the consumer's point of view on the whole problem of silk weighting, the American Home Economics Association filed a petition with the American Standards Association to call a conference of manufacturers, sellers, and consumers of silk to discuss the various aspects of the problem under neutral auspices. Representatives of the interested groups were invited to meet together on July 25, 1929, for an open discussion of the entire matter. The American Federation of Women's Clubs, the Bureau of Home Economics, the American Home Economics Association, and Consumers' Research, were the consumer groups sending representatives to the conference. Both the manufacturers and the retailers of silk took the attitude during these meetings that the consumers were interlopers in the silk weighting controversy and they declined to participate in further conferences under the auspices of the American Standards Association for the purpose of arriving at standards for silk. They justified their attitude on the ground that the manufacturers and sellers of silk had already appointed a so-called "Joint Committee on Weighted Silk" to study the problem of silk weighting under the chairmanship of an officer of the Better Business Bureau. During the American Standards Association conference it was indicated that consumer representatives might be invited to become members of the Joint Technical Committee, and an invitation was later extended to the American Home Economics Association and to Consumers' Research to appoint

representatives to serve on this Committee. The Joint Committee on Silk Weighting had previously appointed a sub-committee of technicians called the "Joint Technical Committee on Silk Weighting," created for the purpose of conducting and sponsoring research on the subject of the effect of weighting on silk. The American Home Economics Association was invited to appoint one representative on this technical committee.

From the beginning of the inclusion of consumer representation on these two committees, it became increasingly apparent that the majority of the members of the committee were far from interested in the consumers' point of view. Some of the committee meetings took on the aspect of a debating forum in which attempts were made to convince the consumer representatives that the situation with regard to silk weighting was not so bad after all, and that nothing could be done about it in any event. The only members of the Joint Technical Committee who performed research of any real scientific value were the representatives from the United States Bureau of Standards and from the American Home Economics Association. Three definite contributions were made to the problem as follows:

(1) Calculations of the amount of weighting in silk were standardized and were placed on a finished fabric basis in terms which any one could understand.

(2) The old bogey about "par" weighting, or adding minerals to take the place of gum removed from the raw silk without including this as weighting in the calculations, was definitely eliminated, and by agreement, this began to be calculated as mineral weighting.

(3) A reliable method for determining weighting of all forms on a quantitative basis was developed.

A mass of information on the effect of tin weighting on the physical and chemical properties of silk was accumulated by the organizations aforementioned, but much of this was ignored in the deliberations of the committee, for reasons of business, as usual.

After attending a number of meetings of the Joint Committee on Silk Weighting, the representative of Consumers' Research reported that no progress for the consumer was being made as a result of its deliberations. Consequently, this organization resigned from membership on the Joint Technical Committee on Silk Weighting on July 23, 1932. The American Home Economics Association still retains its committee membership, but no meetings have been called for almost two years.

Meanwhile, research on silk weighting has gone forward at the Bureau of Standards and in the laboratories of a number of colleges and universities, with the result that a vast amount of valuable data on the subject of mineral weighting have been accumulated. Noteworthy among the researches in the field has been a study at the Bureau of Standards, under the direction of W. D. Appel, whereby an accelerated aging test for silk has been developed. This test makes it possible to determine within a few hours what will be the performance of silk



through a period of months and makes it possible for a vendor of silk to give his customer correct information on the durability of silk at the time of sale if he wants to do so.

### *The Federal Trade Commission Takes a Hand*

The silk weighting situation came to such a pass that the Federal Trade Commission held a Trade Practice Conference on the subject on April 21, 1932. At this conference resolutions were adopted to the effect that "in order to promote equality of opportunity and fair competition" silk goods must be truthfully labeled and represented. Three definitions were drawn up for weighted, pure dye, and mixed goods respectively. Pure dye silk under this definition may contain up to 10% weighting—black, 15%.

At the outset, the obvious purpose of the conference was to regulate unfair practices in trade in so far as manufacturing interests were concerned, and the consumer was only of incidental importance in the discussion. An element which colored the early part of the discussion was the unscientific belief on the part of certain manufacturers, (1) that the weighting of silk up to a certain amount was necessary to replace the soluble gum removed during the finishing of silk; and (2) that the addition of some weighting actually had a beneficial action on silks.

The trend of this part of the discussion is shown in the following quotations taken from the Official Report of Proceedings of the conference:

Mr. Freedman (head of a department store testing laboratory): I am here, Mr. Chairman, to represent the retailers' interest. Silks, in order to be prepared for the consumer have to be finished, and in the finishing process, or included in the finishing process we have the dyeing of silk. Dyes are applied to the silk either with or without a mordant. The mordant may be a metallic salt, like chromium or iron. There may be other mordants used. The use of these mordants are less than one per cent. In the case of Logwood black dye, there the amount of metallic salts used is, as I understand it, over one per cent and in the case of Logwood black there should be an exception made.

However, the consumer, in purchasing silk, is often given silk plus something else as silk, for which the consumer pays in genuine United States currency. She is not receiving full value for her money. And up to the present time little or nothing has been done to inform the consumer as to what she is getting.

Yet the person at the other end of the line is collecting one dollar's worth of currency for possibly fifty cents' worth of something else.

The term pure dye, pure silk, and all silk, should be applied only to those silks having no metallic weighting of more than one per cent, which gives the dyer sufficient leeway, and for all practical purposes the consumer is satisfied. That tolerance, therefore, should be accepted. Where weighting is added other than the metallic weighting that is added as a finishing material or as a sizing to give the fabric a luster or sheen, such goods should not be included in the term pure dye goods.

In other words the term pure dye goods may be used on materials that are finished that contain weighting other than metallic weighting. And that also holds good for the term "pure" and "all silk."

In so far as weighting is concerned—metallic weighting I have in mind—no silks containing any metallic weighting other than the amounts I have just specified should be termed pure dyed silk, pure silk or all silk, as those terms should be considered as being synonymous.

Mr. Barber (silk consultant): Don't forget that the buyer, in processing the goods, has to boil out certain of the natural oils and loses approximately twenty or twenty-five per cent. Now, to bring that silk back to one hundred per cent you have to add weighting, so that Mr. Freedman's argument does not hold.

Mr. Freedman: When we buy grape jam we don't buy it with the seeds, and we don't add apple juice to it and still call it grape jam. The Federal Food and Drug Law requires that we state the presence of apple juice or pectin or what have you in the grape jam and when we buy a can of corn we do not permit any leeway to the manufacturer for the reason that he has removed the husk or the cobs that go with it.

The consumer is buying silk. If she buys pure silk or pure dye silk, she is entitled to it. If the manufacturer is compelled to remove something which has no value in the finished product, he has no right to substitute anything for it and continue to call it pure silk or silk or pure dye silk.

\* \* \*

The consumers' attitude was summarized in the following remarks made by a representative of the American Home Economics Association, Pauline Beery Mack:

Mrs. Mack: The question has been raised as to how much weighting silk can stand and not be ruined.

In the work that we have done through a number of years we have found that any amount of weighting will reduce the quality of the silk, and all other factors being equal, the quality will be reduced in the proportion of the amount of weighting added; so that there is no such thing as going out and adding a certain amount of weighting beyond which the silk is spoiled, because any amount will do certain damage to the silk.

\* \* \*

The quotations presented above will serve to give some idea of the general nature of the type of discussion held at the trade practice conference of the Federal Trade Commission. It became apparent early in the conference that the silk manufacturing representatives outnumbered those representing other interests, and it was found to be impossible to change the proposed rules as they had been previously drawn up by this group. An amendment proposed by a consumer representative to preclude the use of mineral weighting in any amount whatsoever in so-called "silk," "pure silk," or "pure dye silk" was defeated by the manufacturers, although their representatives had assured the consumers in a preliminary conference held the previous day that it was the "intent" of the rule that there be no mineral weighting whatsoever in pure dye silk.

For the benefit of the layman, the significance of the proposed amendment should be explained. The final treatment given to silk during the finishing process consists of applying a water-soluble dressing to give the silk a certain degree of body. This treatment is given to unweighted as well as to weighted silks, and the amount of dressing material added does not need to exceed 3 to 4 per cent of the weight of the finished fabric. Recent researches have shown that 2 to 7 per cent of dressing material is a fair range for silks as found on the market.

In order to allow a safe tolerance for dressing as well as for a small amount of materials which sometimes are added as auxiliary reagents during the dyeing operation, the manufacturers set 15 per cent as the limit of such materials to be used in black silk fabrics, labeled "unweighted," and 10 per cent for fabrics of all other colors. Just why the manufac-

turers should have objected to an amendment to the rule which stated that this tolerated percentage should include no mineral material added for the purpose of increasing the weight of the silk it is difficult to say, unless it was to provide a loophole which would permit the application of a small amount of weighting even in so-called unweighted silks.

Discussion on the floor of the conference concerning the possibility of setting up classes within the weighted silk group which should distinguish between silks weighted to different percentages or which should serve in any other way as a guide to the consumer led nowhere, and the conference closed with the proposal brought by the silk manufacturing group being adopted in its original form. The rules as adopted were disappointing in a measure, but they at least spelled some progress from the consumer viewpoint, since the situation with regard to silk weighting had reached that unhappy state in which any form of regulation should be heralded as a change for the better.

#### *Dissatisfaction with the Ruling*

Recent expressions of dissatisfaction with the Federal Trade Commission ruling in its present form have been voiced, particularly by some of the retail store interests. R. H. Macy & Co. in New York City, for example, has declared that it will go further than the rule specifies, and will offer no silk for sale as pure dye silk which contains any mineral weighting, even though the amount of total materials other than silk present in the finished fabric comes within the limits of the ruling. Other points about which there is considerable dissatisfaction are (1) that the ruling does not provide for the special labeling of fabrics which contain lead weighting; and (2) that the ruling throws all weighted silks into one class, whether the weighting be 20 per cent or 50 per cent.

The first point involves a story all its own, and is discussed below. The second has previously been mentioned. Suffice it to repeat again that sufficient research data (including an accelerated aging test for silks) are available to make a proper classification of weighted silks possible, if the manufacturers were willing to see the consumer put in possession of the facts at the time of purchase.

#### *Lead Weighting*

The somewhat recent introduction of lead weighting into the silk weighting industry has served still further to complicate an already sad state of affairs. It is a startling thing to learn that three hundred million yards of lead weighted silks have been placed on the American market during the past three years by an American firm which owns the patent rights to the use of a lead weighting process. In this case there is involved not only the question of the life of the silk, but a consideration of the possible harm which may result to the wearer of the silk.

The question which must first come to mind when one hears about the process of weighting silk with lead is this: "Why should lead salts, known for centuries as toxic materials, be used for the purpose of weighting silk?" The answer is simply this: Whereas a long succession of immersions are necessary in tin weighting in order to cause the silk approximately to double its weight, only one "pass" through the weighting baths is necessary to accomplish the same results when lead salts are used.

The subject of the possible hazards involved in wearing a lead weighted silk fabric, particularly next to the skin, has been vigorously argued during the past few months in such trade publications as the *Daily News Record* (a dry goods daily). Proponents of the use of this type of fabric argue that the lead compound present in silk is inert and insoluble; that lead compounds (with the exception of tetraethyl lead) may not be absorbed into the body through the portal of the skin; and that no cases of lead poisoning as a result of wearing lead weighted silks have been reported.

The most recent piece of experimental work which has been reported on the possible toxicity of lead weighting in silk is that of Professor Lawrence T. Fairhall of the Department of Physiology of the Harvard University School of Public Health, the research being financed (according to our information) by the American owners of the lead weighting patents. A part of Professor Fairhall's findings were published in the *Daily News Record* for August 23, 1932. The following is quoted from the article in the professor's own words:

"... an extensive investigation at this school [Harvard] has shown that the lead present in lead-weighted silk (lead phosphate) is an extremely insoluble and inert form of lead and does not dissolve in perspiration or saliva or other body fluids with which silk might come into contact.

"Furthermore experiments with human subjects wearing this material show that no trace of lead absorption occurs and hence there is no likelihood of lead poisoning as a result of skin absorption from wearing lead weighted silk."

Those who believe that the consumer should be at least conservative about accepting lead weighted silk argue that it has never been conclusively proved that lead may not enter the body by the portal of the skin; that persons having abrasions in the skin of one sort or another are quite numerous, and that conditions might arise whereby the lead compound of lead weighted silks might enter the skin through an abrasion, even though it might not enter through healthy skin; the compound in lead weighted silk, is not the phosphate, as mentioned in the citation given above, and hence may not behave as the phosphate under all conditions; that the absence of any reported cases of lead poisoning from the wearing of lead weighted silks for a short period of time is not proof that such damage may not have occurred, or that it may not occur upon long wearing of the silk. [As pointed out in another article in this issue, a child who may chew its mother's dress is subject to the hazard of lead poisoning.] In short, the subject is so new and the research work done in this

field so incomplete that the consumer will be wise in avoiding the use of lead weighted silks, until the possible hazards involved are better understood, especially when it is considered that the poisoning effects of lead may appear only after a long period of accumulation, often many years, of the toxic substance in the body.

Researches on the effect of lead weighting on the durability of the silk itself are in progress, and these seem to show in so far as they have gone that the strength of the silk is materially reduced by this treatment. Lead weighted silks also have the undesirable feature of turning brown upon exposure to sulphurous fumes, (present in the smoky air in cities from soft coal smoke, and industrial smokes, for example) because of the formation of the black sulphide of lead in the silk.

### Consumer Tests

How shall the consumer of silk proceed in order to be assured that she is getting unweighted silk if she wants it? The old method of burning a sample or a few threads of silk with a match is only a substitute for a careful laboratory test, but it may serve as a partial help in advance of making a purchase. When either unweighted silk or silk with but a very small amount of weighting is burned with a match, it burns up quickly, forming a black spherical nodule on the end of each thread. If the silk is heavily weighted, it does not burn up as in the former case. Instead, merely the silk burns off, leaving the weighting as a residue. A match does not supply much heat, and hence the test is not clean-cut, but a better test may be made by any one who has access to a high school chemistry laboratory, as follows: Place a sample of the silk in a small porcelain crucible and heat it with a laboratory burner until nothing but a white ash, or no ash at all, remains. The amount of ash will give a qualitative picture of the amount of material other than silk in the fabric, since pure silk will leave no residue whatever after burning.

To consumers who are interested in having accurate determinations made of the percentage of weighting in a silk fabric, or who wish to know whether or not a weighted silk contains lead weighting, Consumers' Research is prepared to announce at this time that it will offer a silk analysis service at \$1 per sample.\* This offer has been made possible because of the fact that a non-commercial research laboratory in which the workers are much interested in the problem of silk weighting will run the tests at this nominal sum in order to bring together a fund of data on this general subject. Consumers who avail themselves of this service, therefore, will not only receive an analysis of the

\*The piece of material submitted for test should be at least 15" square, larger if possible. Details such as the name and address of the store, full representations made in response to your questions or volunteered by the clerk, price per yard of the silk, and, if possible, the maker's name or trade mark should be included, along with the sales slip, duly identified and dated.

silk which they submit, but will help in the cause of investigating the general market conditions with reference to silk. The accumulation of a considerable amount of information on this subject will help consumers in general to get correct information when they buy silk over the counter; of this we are certain.

### The Federal Trade Commission Ruling a Challenge

The consumer of silks who wishes to secure correct information concerning silk when making a purchase of silk yardage or a silk ready-to-wear dress now has, for the first time, the opportunity for help in this direction. This opportunity may not be taken advantage of, however, without the consumer putting forth some effort. The enforcement of the Federal Trade Commission ruling rests entirely in the hands of buyers of silk, or of manufacturers who believe that their competitors are engaging in an unfair business practice. In general, cases must be brought to the attention of the commission in order to have action. CR will arrange to receive and assemble into a formal complaint to the Commission the complaints individual subscribers may care to send in.

The consumer is advised in this connection that labeling of fabrics is not compulsory. If they are labeled, however, or if any designation accompanies them in the displays in the store, or if they are described in advertising, or orally, or in any other way, these descriptions must be accurate. It is highly advisable that no complaint by a consumer be made unless he has had a quantitative analysis of the fabric made, and unless he has his facts concerning the incorrect description of the silk well in hand. If the complaint is based on an oral misrepresentation, it is advisable to have a witness to the conversation and to have careful notes made at the time, not from memory.

A direct challenge is offered to the private consumer to help in making it possible for consumers in general to obtain correct sales information about one of our most important textile commodities—silk.

PAULINE BEERY MACK, PH. D.

### Tooth Paste Made to Measure

THAT dentists should be persuaded to give pharmacists a greater measure of their business by a new development in "creative salesmanship," is the theme of an article in the *Druggists Circular* for September, 1932, by the assistant dean of the New Jersey College of Pharmacy, who advocates closer co-operation between the 67,000 dentists of the United States and the druggists, for the benefit of both professions.

A series of form letters is presented, each beginning "Dear Doctor," in which the foresighted druggist will "announce" a new tooth paste base and a non-medicated mouth rinse. "A tooth paste base," we learn, "may be used . . . for the incorporation



of many antiseptics or germicides . . . Such a base affords the dentist an opportunity to prescribe the medication he wants . . . He may also add a flavor acceptable to the patient and a color to add attractiveness to the paste . . . [of which a] large tube . . . costs approximately five cents . . . medium tube . . . three cents . . . the tube may increase the cost from 3 to 6 cents, according to the type of tube used."\*

Thus the pharmacist will tap new sources of revenue, and the dentist, hitherto hampered by the profit limitations of proprietary brands of dentifrice, be enabled to inject his personality into tubes of tooth paste compounded to his order on the pharmacist's "tooth paste base." Patients will gain a new sense of individuality from the use of their own personal pastes adapted to their own microorganisms. Everyone will be happy, and some will profit.

The author remarks, "I do not believe that there is a professional group today which is more eager to learn the truth about drugs and pharmaceutical preparations which have real merit than the dentist." Later in the article, in discussing the "tooth paste base," that fallow field awaiting the potent ingredients favored by the individual dentists, he says, "It would be unfortunate if this formula should be interpreted as another tooth paste . . . to be sold to anyone over the counter. This tooth paste should be dispensed only on the prescription of the dentist. This is a professional service you are rendering to the dentist. The value of medication in tooth pastes has been questioned [We question it, emphatically—CR] but millions of tubes of medicated pastes are sold each year and dentists do suggest their use. If any medicated tooth paste has therapeutic value, such action as it may have should be governed by the condition of the disease treated. The disease should not be made to fit the medication in the tooth paste."

So "scientific" an approach to the individualized study of oral hygiene is probably not to be readily interpreted by anyone without a pharmaceutical background. Its delicate, restrained, but usefully obscure treatment of the value of dentifrices may be compared with the information in "The Dentifrice Racket," a leaflet available from CR (10c).

## More About Public Utilities

THE last General Bulletin brought an avalanche of mail down on our already heavily overburdened stenographic facilities, but we are gratified at the interest aroused. The article on *Electric Current for Household Use* came in for the major criticism. We were accused of taking sides in a controversial political question, of being socialists, of perpetrating a gigantic piece of partisan political propaganda (as part of a powerful and exceedingly well-financed "machine of misinformation"! ). It is, however, an interesting fact that all but one of

\*These prices for tooth paste compounded on a minute pharmacy-back-room scale throw some light on the profits gained by the large dentifrice manufacturers.

the adverse criticisms have come from men with investment-banking or public utility connections, whose natural bias is as different as can well be imagined from that of the average consumer—who is just as interested in buying electricity as cheaply as possible, as any other commodity, whether vacuum cleaners or jam. The consumer's concern for cheap electricity is as just and useful economically, as are the public utility's efforts in getting rock-bottom prices on its coal, oil, or boiler compound (where no tie exists between officials in dual relationships†, tending to negative a desire for economical purchase in any given case). For the benefit of those who seem to think that one must have concealed political affiliations to deal with the utility question in any fashion but one complimentary to the magnates of the industry, we quote the following from *Editor and Publisher*, which as the trade journal of the newspaper business could hardly be accused of any particular party affiliation, or of any radical or other anti-business bias:

"The receivers of Insull Utility Investments, Inc., this week reported to the Federal Court in Chicago these astounding figures: Liabilities, \$250,003,526; assets, \$31,429,549; deficit, \$226,510,976. Cash on hand was \$9,722. Other Alice in Wonderland revelations are contained in the report.

"Reading these facts with corollaries in reference to the manipulations of Insull affairs by an audacious inside group, we can better comprehend why Insull publicity men were so active and abusive three years ago when newspapers began to expose the facts taken in the so-called Power Trust investigation by the Federal Trade Commission. The evidence concerning attempts to subsidize and otherwise corrupt news and editorial columns brought *Editor and Publisher* into the fray and we have not forgotten the ruthless, though futile, efforts of Insull publicity men to silence our voice and, failing, effect commercial reprisals.

"It would be interesting to learn how much of the vast deficit showing in the receivers' report checks back to activities of the Insull propagandists. They must have spent stockholder money like water. The wash now on the line indicates what they had to cover up."

"When the products of industry pass over the retail counter, economic science almost entirely loses count of them. They pass from sight into the mysterious maw of 'the consumer.' It has never occurred to the economist that it is just as important to have a clear and close knowledge of what happens to products when they have become consumers' goods, as it is to trace their history in the productive stages." (from *Work and Wealth* by J. A. Hobson. New York: Macmillan, 1922.)

†For example, interlocking directorships and influences common in all large industrial organizations give a compelling drive either directly or through banks or holding companies for "reciprocal buying" or buying on some other basis than the selection of equipment or supplies offered by the lowest bidder meeting the specifications. (*Supply of Electrical Equipment and Competitive Conditions*. Senate Document No. 46, 70th Congress, First Session. Response of Federal Trade Commission to Senate Resolution 329.)

## We Can't Be Pikers

By Don Herold

(Reprinted by permission from LIFE of August 28, 1931.)

**M**Y DENTIST has just suggested a little dental work which he says will cost about \$2,000. Well, they're my teeth and they're the only teeth I have and nothing is too good for my teeth (for our teeth are our life), so I suppose I ought to shoot the \$2,000, and be glad of the chance. I can't be a piker where my teeth are concerned.

This is exactly the kind of Christmas spirit my dentist expects me to have towards my teeth—this wanton willingness to shoot the moon—to yield to the bald logic and at the same time to the sweet sentiment of the situation.

Nothing is too good for my teeth—

It's all right and just dandy, except that we humans are given this opportunity to shoot the moon rather frequently nowadays.

There are so many chances to give our all . . . to shoot the works . . . to blow our wad . . . so many Christmases per annum.

It has become a merchandising formula—just put it in the Christmas category and you've got 'em.

If you're on a trip and go into a gift shop to buy trinkets for your loved ones, you'll find wantonness expected of you . . . by every price tag.

You can't even allow yourself the sacrilegious suspicion that everything is marked double for just such sentimental suckers as yourself. Your loved ones who couldn't come along, who had to stay home—and you would stoop to notice a few dollars' exorbitance in the price of remembrances for them!

There's where stores and professional men love to catch us. That's why toy departments can sell \$150 tin steam shovels to doting daddies . . . why 15-minute appendectomies are \$1,500 . . . why florists flourish . . . why tombstones are \$3,000 . . . why orchids have a market . . . why undertakers can get a thousand berries for a phony pine box covered with fluff . . . why the telegraph companies hook us on all the new sentimental holidays (which are being invented at the rate of about one a year).

She's our only sweetheart—it's the only gall bladder we have—Christmas comes but once a year . . . we have only one Mother . . . we're engaged only once and married only once and buried only once . . . and we have only one nasal septum and only one set of natural teeth—

—So WHY SHOULDN'T we shoot the moon—blow our all—about three times a week?

We can't be pikers.

The only thing is, I wish I, myself, were in a business in which I could embarrass my customers into giving me their shirts. I believe I'll start making bassinets.

## Back to Thrift

**T**HRIFT is suddenly being discovered. The National Industrial Conference Board, after a pall of silence hovering for years during the hoopla era over the business community on this question, is conducting a survey crystallizing the opinions of leading business executives on the possibility of discovering a way to prevent business crises. "Probably the largest number believes that a return to the early principles of individual thrift offers the soundest solution." The . . . report admits that much educational work is necessary to make such a program effective on a large scale."

We shall be convinced of the sincerity of the business leaders' view when we read in advertisements of *Westinghouse*, *General Electric*, *General Motors* and *Nash*, that the purchase of an electric refrigerator or a new car should by no means be considered unless one has a satisfactory reserve in the savings bank against a rainy day. It is all very well for business leaders to suggest thrift in the safe anonymity of a conference board survey. From the consumer's point of view, leadership will have value only in so far as it arrives in time to prevent the debacle, and when it concretely, tangibly and in thousands of specific businesses, puts the brakes upon aggressive and inconsiderate salesmanship in person, by radio, and by the printed word.

### About the General Bulletin

**S**UBSCRIPTIONS to the General Bulletin are accepted only for the period October 1932-1933 regardless of the date on which a remittance is sent in. There are two reasons for this; (1) it effects economies in the office routine of handling the subscriptions; and (2) since this service is in the nature of an experiment, we do not wish to commit ourselves to it for a period longer than a year.

Those who subscribe both to the confidential service (\$2.00—available only to private individuals) and to the General Bulletin, should mention in sending in a change of address that they subscribe to both services, otherwise only one change will be noted.

Those who subscribe to the General Bulletin only, cannot, for reasons of economy, be given any service by correspondence. All subscribers who wish replies to their letters, except in the matter of routine adjustments, are requested to furnish a stamped, addressed envelope for this purpose, of not less than 9 x 4".

May we suggest that the General Bulletin makes an excellent Christmas gift to friends not familiar with our service?

## Editorial Policies and Advertising Accounts

APOLOGISTS for the newspaper press fluctuate between a belief in the entire freedom of the newspaper as an impartial institution for dissemination of news and an indispensable forum for the discussion of public questions—and occasional hesitating confessions that not all that goes on in a newspaper office is free from suspicion of advertiser control. In a recent editorial in *Editor and Publisher*, the trade journal of the newspaper business, reference is made to the revolutionary step taken by *Purchasing*, to insure its editorial freedom. That trade journal, it will be recalled, has ceased to accept paid advertisements (a brief account appeared in the September, 1932, issue of CR's General Bulletin).

On this subject *Editor and Publisher's* editor says: "The statement . . . 'the reasonable cost of any service should be defrayed by those using the service' is a revolutionary publication theory. When readers pay their way in this fair land all sorts of queer things may start to pop. The changes would be far more profound than any mere publishing economy. The social system, and perhaps the political and economic systems might be heavily influenced by new factors."

If the policies of newspapers and magazines are now for the most part free from advertiser dictation, as owners and editors vociferously proclaim, it is difficult for any observer to see how the social system, and possibly the political and economic systems, could be seriously modified by this new factor. Perhaps this is as significant a confession as any recently appearing of the power wielded by commercial interest over the press.

Continuing with respect to trade journals which live by advertising, *Editor and Publisher* says of some trade journals which are poorly written and which have the reputation of being "editorially oblique," . . . "maybe they are so deeply entrenched, however, that it would require the rivalry of a non-advertising sheet, edited by some hard-hitting truth-sayer, to root them out and give the industry they cater to a clean bath. I suppose that for such service the factors in the industry would be grateful enough to pay \$100 a year for a weekly paper. But if there is any honest advertising which might be included in an honest paper, why deny its right to show?"

The editor of a prominent Eastern newspaper, unnamed, wrote to *Editor and Publisher* recently to the following effect: "There is an irreconcilable conflict of loyalties between the editorial and the advertising departments. Editorial loyalty must be to the reading public. Advertising's loyalty must be to the advertiser. Too often the interests of the two are not the same. Thoughtful advertising men admit it. I believe the domination of newspapers by advertising today is as bad business as it is a perversion of the fundamental function of a newspaper. Newspapers have grown bigger, with all that means in increasing mechanical facilities and personnel costs, almost solely as a result of increasing advertising. Any honest breakdown shows much advertising produced at terrific loss. Take the automobile section, for instance. [The section devoted to "puffs" of new cars, urging to take long trips,

to buy reliable trademarked gasoline and oil, to have your brakes adjusted frequently, and to change your tires often.] Any honest bookkeeping would charge all the cost of editorial work, composition, makeup and newsprint for this accompanying reading matter to advertising expense. We do not! I believe an honest newspaper must be run with a stone wall dividing the business and the editorial offices, with no ladders handy. The other way out is the adless newspaper . . ."

Again we note, in *Advertising and Selling* of September 15, 1932, "That editorial offices frequently have sacred cows which must not be offended is undoubtedly true. And in this connection, 'offended' has broad connotations. For some advertisers can detect criticism more quickly than a Methodist bishop can smell hooch."

The manner in which advertisers frankly exert pressure upon newspapers to modify that "free forum" of public information in the advertisers' interest, is illustrated by another item in the same issue of *Editor and Publisher*. Six Chicago advertising agencies have written to newspapers in all cities of 50,000 population or more, to ask the exclusion of advertising of automobile travel by private cars, such as that under the heads "Travel Opportunities,"\* "Share Expense in Travel," except where the public is safeguarded by local or state legislation.

The frank assumption by the agencies of their right to dictate their commercial needs to the paper is the significant factor in this situation. The transportation companies which the six agencies represent "are spending hundreds of thousands of dollars in advertising where those occupied in the above-stated method of transportation are spending hundreds," says a joint letter to 406 newspapers; "yet it is estimated that these types of transportation are diverting a large amount of revenue from the railroad, bus, and steamship companies." [the agencies' clients]

If the newspaper is indeed a "free forum" as its publishers claim, the relative advertising expenditures of the two types of transportation agencies should obviously have not the slightest influence upon whether any advertisement or class of advertising is acceptable or not. The fact that the advertisers in this case frankly assumed that the larger amount spent in advertising by their clients was a valid reason for the exclusion of the advertising of their competitors, would indicate that the "open forum" is more or less a business proposition open to high bidders on more favorable terms than to low ones.

\*Such "travel opportunities" do involve serious hazards and one will be wise to avoid them except in cases where the best of precautions can be taken in advance to assure actual "delivery" of the promised transportation, and safety on the journey. It is, however, not of record that the advertising agencies have attempted to bar advertising of faucet-type electric water heaters, or *Koremku*, a poisonous depilatory advertised as safe, until the public in those fields of consumption respectively, is protected by local or state legislation.



